## **CLAIMS**

I claim:

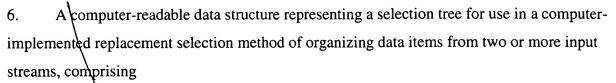
A replacement selection method for organizing data items from two or more input streams\comprising the steps of:

identifying a data item being processed from one of the input streams as being a duplicate of a previously processed data item;

retaining an indication that the data item being processed is a duplicate data item; and organizing the data items responsive at least in part to the indication that the data item being processed is a duplicate data item.

- The method of claim 1, wherein the indication that the data item being processed is a 2. duplicate data item is one value of an indicator having values corresponding to "empty", "duplicate", "merging and "done".
- The method of claim 2, wherein: 3. the indicator is an integer variable; the indicator value corresponding to "empty" is the value zero; the indicator value corresponding to "duplicate" is the value one; the indicator value corresponding to "merging" is the value two; and the indicator value corresponding to "done" is the value three.
- The method of claim 3, wherein the step of organizing is reponsive to comparisons 4. between the values of the integer variable indicator values associated with data items being compared.
- The method of claim 1, wherein the method is a replacement selection method using a 5. loser-oriented selection tree.





for each node of the selection tree:

an identifier of one of the input streams,

a reference to a data item being processed from that one of the input streams; and an indication whether the data item being processed is a duplicate.

- 7. The data structure of claim 6, wherein the indication that the data item being processed is a duplicate is one value of an indicator having values corresponding to "empty", "duplicate", "merging" and "done".
- 8. The data structure of claim 7, wherein:
  the indicator is an integer variable;
  the indicator value corresponding to "empty" is the value zero,
  the indicator value corresponding to "duplicate" is the value one;
  the indicator value corresponding to "merging" is the value two; and
  the indicator value corresponding to "done" is the value three.
- 9. An article for use in a computer implemented replacement selection method for organizing data items from two or more input streams comprising:

a computer-readable signal-bearing medium;

means in the medium for identifying a data item being processed from one of the input streams as being a duplicate of a previously processed data item;

means in the medium for retaining an indication that the data item being processed is a duplicate data item; and

means in the medium for organizing the data items responsive at least in part to the indication that the data item being processed is a duplicate data item.

- 10. The article of claim 9, wherein the indication that the data item being processed is a duplicate data item is a value of an indicator having values corresponding to "empty", "duplicate", "merging" and "done".
- 11. The article of claim 10, wherein the indicator is an integer variable; the indicator value corresponding to "empty" is the value zero; the indicator value corresponding to "duplicate" is the value one; the indicator value corresponding to "merging" is the value two; and the indicator value corresponding to "done" is the value three.
- 12. The article of claim 11, wherein the means for organizing is reponsive to comparisons between the values of the integer variable indicator values associated with data items being compared.
- 13. The article of claim 9, wherein the method is a replacement selection method using a loser-oriented selection tree.
- 14. The article of claim 9, wherein the medium is selected from the group consisting of a recordable data storage medium, and a modulated carrier signal.